Trilateral Project B3a

Exchange of Search Results

Report on Concurrent Search Program using PCT Applications for Business Method-related Inventions

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Report on Concurrent Search Program using PCT Applications for Business Method–related Inventions Carried Out under Trilateral Project B3a

1. Introduction

1.1 Background

As much attention has been paid to so-called business method patents, the Trilateral Offices have been receiving ever-increasing numbers of patent applications directed to business method-related inventions. To facilitate consistent search and examination practices, to the maximum extent possible under varying national practices, it was discussed that efforts to promote mutual understanding with respect to these issues would be beneficial.

At the Trilateral Conference in November 1999, the Trilateral Offices showed their interest in a comparative study on business method-related inventions for the purpose of clarifying current practices on this emerging field. The USPTO and the JPO agreed to start the study and adopt a final report at the next Trilateral Technical Meeting.

At the Trilateral Technical Meeting in June 2000, the Trilateral Offices adopted the final report on the comparative study using hypothetical claim sets focusing on business method-related inventions which included a "Consensus Summary" on current practices confirmed by the Trilateral Offices. [1]

Based upon the results of the said comparative study, it was noted that the difference in the requirements for statutory subject matter did not seem major, given that the examination results as a whole were consistent between the USPTO and the JPO. At the same time, the Trilateral Offices recognized that the Trilateral Offices should focus on, as a next stage, collaboration of searching prior art in the field of business method-related inventions through the framework of Trilateral cooperation. Finally, the Trilateral Offices agreed to initiate a Concurrent Search program using PCT applications directed to business method-related inventions as well as to make further discussion among technical experts in order to develop a detailed scheme after the Trilateral Technical Meeting.

At the Trilateral Conference in November 2000, the Trilateral Offices agreed on the details of a concurrent search program in order to compare the usefulness of the respective search tools in this area and agreed to start the program in January 2001.

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[1] *Report on Comparative Study Carried Out Under Trilateral Project B3b* is retrievable from<http://www.jpo.go.jp/saikine/tws/b3b_start_page.htm>, <http://www.european-patent-office.org/tws/b3b_sta

1.2 Outline of the Concurrent Search program

1.2.1 Purposes

The purpose of the Concurrent Search program is to promote mutual understanding of search sources/tools and search strategies in the field of business method-related inventions used by the Trilateral Offices. Furthermore, analysis of the results would serve to explore the possibility of improving the quality of searches in the framework of Trilateral cooperation as well as related effective cooperative activities therefor.

1.2.2 Procedures

The Trilateral Offices determined that up to 20 PCT applications still in the international phase should be selected as the subject of the Concurrent Search program. The criteria for selecting PCT applications include (i) the USPTO is the receiving Office (RO) and the International Searching Authority (ISA) thereof, (ii) the EPO and the JPO are designated Offices thereof, and (iii) United States Classification (USC) Class 705 is assigned thereto.[2]

The USPTO selected 20 PCT applications meeting the said criteria with approval from applicants. (See Appendix 1) The USPTO transmitted copies of each PCT application to the EPO and the JPO. Subsequently, examiners of the three Offices independently conducted prior art searches after having identified the claimed inventions disclosed in the PCT applications in a manner similar to the International Searching stage for PCT applications.[3]

After completing the prior art search, the examiner filled out the questionnaire including a search report which indicates (i) the scope of the claim as interpreted by the Office (i.e., what does the claim cover/include?) and (ii) the search strategies (e.g., areas/sources searched, priority thereof and the specific queries used), and identifies (iii) the documents considered relevant, and transmitted copies of the questionnaire to the other two Offices. The examiners of the three Offices, when appropriate, discussed each other's search results based on the questionnaires and thereby increased mutual understanding regarding search sources/tools and search strategies.

This report summarizes the results of the concurrent searches carried out with regard to the 20

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rt_page.htm> or <http://www.uspto.gov/web/tws/b3b_start_page.htm>

[2] Class 705 contains numerous small groupings and four major groupings directed to specific and general business data processing machines and methods. Most of the so-called computer implemented business method-related patent applications are assigned Class 705. For details, visit <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/def/705.htm>.

[3] For details, see *PCT International Guidelines (as in force from 18 September 1998)* available at <http://pctgazette.wipo.int/pdf/401998-e.pdf>.

PCT applications mainly on the basis of the said questionnaires including search reports for each PCT application prepared by the examiners of the three Offices as well as related comments.

2. Results of the Concurrent Search

2.1 Exclusions from the Concurrent Search

There are several applications as well as some of the claims which have not been searched in this concurrent search program. Such applications and claims can be found in the comparative tables shown in Appendix 2 by a slanted line which indicates no search for the purpose of this program was carried out.[4] The results are as follows.

- The USPTO carried out the concurrent search for every claimed invention disclosed in every PCT application.
- The JPO carried out the search for this program except for some of the claims in "Case 18" which apparently fall under "methods of doing business" defined in PCT Rule 39(iii) as subject matter not to be searched under PCT Article 17(2)(a)(i). However, it should be noted that the JPO, taking into consideration the purpose of this program, has conducted the search even for the applications ("Cases 6" and "Case 15") or some of the claims (in "Case 8," "Case 9" and "Case 10") for which the JPO would not have performed a search if the JPO was officially establishing the International Search Report (ISR) as the International Searching Authority.
- The EPO excluded from the subject of the concurrent search all of the claims in "Case 8," "Case 9," "Case 10" and "Case 15" and some of the claims in "Case 7," "Case 13" and "Case 17," because the EPO considered the claims to fall under "methods of doing business" defined in PCT Rule 39(iii) as subject matter not to be searched under PCT Article 17(2)(a)(i) or the claims relate to commonplace technological implementations of "methods of doing businesses" so that no meaningful search could be made as is prescribed in PCT Article 17(2)(a)(ii).[5] The EPO commented that "Case 19" and "Case 20" appear to be mainly a business method with some commonplace technical features so that "No Search" declarations

[4] It should be noted that the fact that certain claims were subjected to concurrent searches in this program or may be subject to international searches does not necessarily mean that such claimed inventions satisfy the domestic criteria regarding patentability such as "description requirements" and "statutory requirement."

[5] PCT Article 17(2)(a)(ii) prescribes that "if the International Searching Authority considers that the description, the claims, or the drawings, fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, the said Authority shall so declare and shall notify the applicant and the International Bureau that no international search report will be established."

could have been issued if the EPO was officially establishing the International Search Reports (ISR) as the International Searching Authority.

2.2 Claims for which relevant prior art documents were found

Appendix 2 shows that each Office was able to find relevant prior art documents, to which symbols "X" or "Y" are assigned, for all of the PCT applications and most of the claims subjected to concurrent search.[6,7] It goes without saying that the prior art document to which one Office assigned "X" or "Y" symbol is not necessarily determined to be assigned "X" or "Y" symbol by another Office.

The results are as follows.

- The USPTO found relevant prior art documents for all of the claims in every case,
- the JPO found relevant prior art documents for 309 claims of the 347 claims which were subjected to concurrent search, and
- the EPO found relevant prior art documents for 252 claims of the 273 claims which were subjected to concurrent search.

A total of 263 claims were commonly searched by the Trilateral Offices. All three Offices were able to find relevant prior art for more than 92% of the 263 claims.

2.3 Search Strategy

Appendix 3 shows the search strategies used by the examiners of the three Offices for each PCT application. The standard search strategy adopted by each Office is summarized as follows.

JPO

(1) At first, the JPO used the F-term search system to search domestic patent literature by means of F-term/FI index-search or text-search or a combination thereof, and simultaneously or subsequently, searched domestic non-patent literature (NPL) using CSDB (JPO's internal database) by means of CS-term index-search or text-search or a combination thereof. (The JPO ended the search after completion of this step due to the fact that relevant prior art documents were fully obtained in 10

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[6] A document whose content destroys the novelty or whose content alone calls into question the inventive step of at least one independent claim, and possibly that of one or more claims depending on it is categorized as "X." A document whose content by combination of the other cited document(s) calls into question the inventive step of at least one independent claim, and possibly that of one or more claims depending on it is categorized as "Y." The symbol "A" is assigned to a document concerning the part of the features of a claim's body or characterized portion, but not calling the inventive step into question, or a document describing the general technological background to the invention. In details, see *PCT International Guidelines* as mentioned in footnote 3.

[7] It should be noted that the fact that claims for which relevant prior art literature to which symbols "X" or "Y" are assigned were not found do not necessarily satisfy other criteria regarding patentability such

cases (Cases 2, 5, 6, 8, 9, 12, 14, 16, 18 and 19).)

(2) At the next stage, if necessary, the JPO searched other non-patent literature (NPL) using the commercial databases, general search engines such as "Google," and manual search. (The JPO ended the search after completion of this step due to the fact that relevant prior art documents were fully obtained in 1 case (Case 1).)

(3) After completion of steps (1) or (2), if necessary, the JPO searched foreign patent literature. The JPO used USPTO Web database for searching US patent literature by means of USC classification-search or text-search or a combination thereof in 5 cases (Cases 3, 4, 7, 10 and 11), and used esp@ce for searching foreign patent literature by means of ECLA index-search or text-search or a combination thereof in 5 cases (Cases 10, 11, 13, 15 and 17). The JPO also used the F-term search system and the JPO PCF to search US and EP patent literature. The JPO mainly used WPI (DIALOG) to search other foreign patent literature.

EPO

(1) The EPO did not conduct concurrent searches for all of the claims in 4 cases (Cases 8, 9, 10 and 15) under the provisions of PCT Article 17(2)(a)(i) or (ii) as stated in "2.1."

(2) In most cases, the EPO searched all of foreign patent literature (US, JP, WO patent literature, etc.) in addition to EP patent literature by specifying all of the text databases including WPI through text-search. For searching EP patent literature, the EPO used ECLA index-search in addition to text-search. (The EPO ended the search at this step in 6 cases (Cases 4, 5, 6, 7, 11 and 14) since highly relevant prior art documents were obtained.).

(3) The EPO further searched non-patent literature (NPL) mainly by using INSPEC (commercial database) and Internet search sites in 10 cases (Cases 1, 2, 3, 12, 13, 16, 17, 18, 19 and 20).

USPTO

(1) The USPTO used EAST or WEST to search US patent literature by USC classification search or text-search or a combination thereof. (The USPTO ended the search after completion of this step in 8 cases (Cases 2, 4, 7, 12, 13, 14, 15 and 17) since relevant prior art literature was obtained.)

(2) Subsequently, the USPTO searched non-patent literature (NPL) mainly by using DIALOG or STN (commercial databases) and general search engines on the Internet. (The USPTO ended the search after completion of this step in 4 cases (Cases 5, 9, 18 and 20) since relevant prior art literature was obtained.)

(3) Likewise the EPO, the USPTO searched all of foreign patent literature (EP, JP, WO patent literature,

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as "description requirements" and "statutory requirement" in domestic laws.

etc.) in addition to US patent literature by specifying all of the text databases including WPI through text-search.

2.4 Types of Relevant References and related Search Sources/Tools

Appendix 4 shows the types of citations and related search sources/tools from or through which the relevant citations were found. "Table 1" below summarizes the results of Appendix 4 in terms of the types of references cited by the three Offices.

Table 1

Numbers and percentages of types of references cited by the three Offices

		JP	US	EP	WO	others	NPL	Total
JPO	Total	34	14	1	1	1	13	64
	%	53%	22%	2%	2%	2%	20%	
USPTO	Total	0	48	0	4	0	5	57
	%	0%	84%	0%	8%	0%	9%	
EPO	Total	0	21	1	15	0	5	42
	%	0%	50%	2%	36%	0%	12%	
the three Offices	Total	34	78[8]	2	20	1	23	158
	%	22%	49%	1%	13%	1%	15%	
Published after '98		15	61	2	17	0	22	117
		44%	78%	100%	85%	-	96%	74%

The types of references cited by each Office is as follows.

- The JPO cited a total of 64 patent and non-patent literature documents (NPL) to which X or Y categories are assigned. More than half of the citations are domestic JP patent literature found using F-Term searching system. Most of the foreign patent literature is US patents which were found mainly by using the USPTO Web database and JPO PCF. Both the number and percentage of non-patent literature (NPL) are relatively high compared to the other Offices where 5 relevant NPLs were found using the Internet and 2 were found using ProQuest.

- The USPTO cited a total of 57 patent and non-patent literature documents (NPL) to which X or Y categories are assigned. The percentage of citing domestic US patent literature is considerably high (more than 80%). Most of US patent literature was found using EAST or WEST. Relevant foreign patent literature such as WO patent literature was found mainly using DIALOG or STN. One relevant non-patent literature (NPL) document was found using

[8] The number of overlapping US patent literature was excluded from the total number of US patent literature cited by either of the three Offices.

ProQuest.

- The EPO cited a total of 42 patent and non-patent literature documents (NPL) to which X or Y categories are assigned. The percentage of US and WO patent literature is relatively high compared to the other types of citations. 4 relevant NPLs were found using the Internet.

In addition, the following can be pointed out.

- Nearly half of the references cited by at least one of the three Offices are US patent literature (One of the reasons may be due to the fact that the nationality of most applicants of PCT applications subjected to this concurrent search program are from the United States so that the background business customs are deemed "American-style." The other reason may be attributed to the fact that the United States itself is the center of E-commerce business.).
- The percentage of WO patent literature is deemed relatively high. It is not surprising that most applicants of the cited WO patents are from the United States.
- Nearly 80% of US and WO patent literature cited by the three Offices were published after 1998.
- Although the percentage of the cited JP patent literature is the highest except for US patent literature, the only Office that cited JP patent literature was the JPO. The other two Offices did not cite JP patent literature.

See Appendix 5 for the list of commercial databases and search engines available on the Internet used for searching NPL. The three Offices used commercial databases and search engines available on the Internet for searching NPLs and found relevant references even though the number of cited references is low. However, a common strategy among the three Offices was not found.

Finally, it should be noted that the number of prior art documents which were commonly cited by the two or the three Offices was extremely low. One important reason is attributed to the very success of the searches by the three Offices. Since the searches were terminated at various stages if relevant prior art documents had been found, the searches may have been terminated without finding common documents simply because the prior art was searched in a different order as stated in "2.3." The reasons may also be attributed to the differences of the methodologies for determining "novelty" or "inventive-step" among the three Offices as well as to the linguistic barrier.

3. Conclusion

(1) Although search sources/tools and search strategies among the three Offices were different, each Office was able to find relevant prior art documents for all of the PCT applications and most of the claims for which the concurrent searches were performed. It is confirmed that the each Office's

ability to search prior art documents for business method-related inventions is satisfactory at this stage.

(2) The possibility of finding relevant prior art documents from US, WO and EP patent literature is high considering the fact that the percentage of cited US patent literature was 49%, and WO and EP patent literature was 14%, and JP patent literature was 22%. Therefore, it would be useful for the JPO to accumulate information with regard to search tools (USC and ECLA and its practice) and search strategy (know-how of USC/ECLA classification/index searches and text-searches) in order to increase the quality of searches. Such information is especially highly relevant when the JPO is unable to find relevant prior art from Japanese-language literature. The JPO dealt with such circumstances in five cases in this program.

(3) On the other hand, it should be noted that in spite of considerably high probability of finding relevant prior art documents from JP patent literature (22%), the other two Offices cited no JP patent literature. Therefore it would be useful for the USPTO and the EPO to accumulate information on search tools of the JPO (F-term/FI and its practice) as well as know-how for searches. This would be highly relevant when searching for business method-related inventions whose background is unique to Japan.

(4) The number and percentage of non-patent literature (NPL) were not so high compared to patent literature, since a common strategy was not found using commercial databases and general search engines, it would be helpful to further exchange of information on practices of searching NPLs.

4. Further Consideration

Although each Office's ability to search prior art documents for business method-related inventions is confirmed to be almost satisfactory through this concurrent searching program,

recognizing the relatively high possibility of finding relevant prior art for business method-related inventions from domestic and foreign patent literature (US, WO and JP patent literature, etc.),

the Trilateral Offices agreed to exchange information on search tools/sources and practices including USC classification, ECLA and FI/F-term index and its practice in addition to information on effective or newly employed commercial databases or search engines.

Appendix 1

20 Applications for the Concurrent Search Program for Business Method-related Inventions

Case No.	Application No.	Number of Claims	USClass Assigned
1	PCT/US00/*****	21	705/21 (Interconnection or interaction of plural electronic cash registers (ECRs) or to host computer (e.g., network detail, transfer of information from host to ECR or from ECR to ECR, etc.))
2	PCT/US00/*****	25	705/64 (Secure transaction (e.g., EFT/POS))
3	PCT/US01/*****	20	705/36 (Portfolio selection, planning or analysis)
4	PCT/US00/*****	20	705/ 1 (AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS PRACTICE OR MANAGEMENT ARRANGEMENT)
5	PCT/US01/*****	20	705/10 (Market analysis, demand forecasting or surveying)
6	PCT/US01/*****	24	705/ 2 (Health care management (e.g., record management, ICDA billing))
7	PCT/US01/*****	17	705/ 1 (AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS PRACTICE OR MANAGEMENT ARRANGEMENT)
8	PCT/US01/*****	14	705/26 (Electronic shopping (e.g., remote ordering))
9	PCT/US01/*****	20	705/ 7 (Operations research)
10	PCT/US01/*****	20	705/10 (Market analysis, demand forecasting or surveying)
11	PCT/US01/*****	24	705/26 (Electronic shopping (e.g., remote ordering))
12	PCT/US01/*****	21	705/28 (Inventory management)
13	PCT/US01/*****	20	705/30 (Accounting)
14	PCT/US01/*****	10	705/27 (Presentation of image or description of sales item (e.g., electronic catalog browsing))
15	PCT/US01/*****	11	705/14 (Distribution or redemption of coupon, or incentive or promotion program)
16	PCT/US01/*****	9	705/ 2 (Health care management (e.g., record management, ICDA billing))
17	PCT/US01/*****	22	705/37 (Trading, matching, or bidding)
18	PCT/US01/*****	19	705/22 (Inventory monitoring)
19	PCT/US01/*****	2	705/ 8 (Allocating resources or scheduling for an administrative function)
20	PCT/US01/*****	18	705/28 (Inventory management)

Appendix 2-1

Search results comparative table

- The categories cited for each claim are indicated ("X" precedes "Y").
- A slanted line means that the claim was not searched in this program.

Case No.1

	Category of cited document		
Claim	USPTO	EPO	JPO
1	Y	X	Y
2	Y	X	Y
3	Y	X	Y
4	Y	X	Y
5	Y	X	A
6	Y	X	A
7	Y	X	Y
8	Y	X	Y
9	Y	X	Y
10	Y	X	Y
11	Y	X	Y
12	Y	X	Y
13	Y	X	Y
14	Y	X	Y
15	Y	X	A
16	Y	X	A
17	Y	X	Y
18	Y	X	Y
19	Y	X	Y
20	Y	X	Y
21	Y	X	Y

Case No.2

	Category of cited document		
Claim	USPTO	EPO	JPO
1	Y	X	Y
2	Y	X	Y
3	Y	X	Y
4	Y	X	Y
5	Y	X	Y
6	Y	X	Y
7	Y	X	Y
8	Y	X	Y
9	Y	X	Y
10	Y		Y
11	Y		Y
12	Y		Y
13	Y		Y
14	Y		Y
15	Y		Y
16	Y		Y
17	Y		Y
18	Y		Y
19	Y		Y
20	Y	X	Y
21	Y	X	Y
22	Y	X	Y
23	Y	X	Y
24	Y	X	Y
25	Y	X	Y

Appendix 2-2

Case No.3

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X	X	X
2	X	X	X
3	X	X	X
4	X	X	X
5	X	X	X
6	X	X	X
7	X	X	X
8	X	X	X
9	X	X	X
10	X	X	X
11	X	X	X
12	X	X	X
13	X	X	X
14	X	X	X
15	X	X	X
16	X	X	X
17	X	X	X
18	X	X	X
19	X	X	X
20	X	X	X

Case No.4

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X	X	X
2	X	X	X
3	Y	X	X
4	Y	X	X
5	X	X	X
6	X	X	X
7	X	X	X
8	X	X	X
9	Y	X	X
10	Y	X	X
11	X	X	X
12	X	X	X
13	X	X	X
14	X	X	X
15	X	X	X
16	X	X	X
17	X	X	X
18	X	X	X
19	X	X	X
20	Y	X	X

Case No.5

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X	X	X
2	X	X	X
3	X	X	Y
4	X	X	Y
5	X	X	Y
6	X	X	Y
7	Y	X	Y
8	X	X	Y
9	X	X	Y
10	X	X	X
11	X	X	X
12	X	X	X
13	X	X	X
14	X	X	X
15	Y	X	X
16	X	X	X
17	X	X	Y
18	X	X	Y
19	Y	X	X
20	Y	X	Y

Case No.6

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	X	X
2	Y	X	X
3	Y	X	X
4	Y	X	X
5	Y	X	X
6	Y	X	X
7	Y	X	X
8	Y	X	X
9	Y	X	X
10	Y	X	X
11	Y	X	X
12	Y	X	Y
13	Y	X	X
14	Y	X	X
15	Y	X	X
16	Y	X	X
17	Y	X	X
18	Y	X	X
19	Y	X	X
20	Y	X	X
21	Y	X	X
22	Y	X	X
23	Y	X	X
24	Y	X	X

Appendix 2-3

Case No.7

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	X	X
2	Y	X	X
3	Y	X	X
4	Y	X	X
5	Y	X	X
6	Y	X	X
7	Y	X	X
8	Y	X	X
9	Y	X	X
10	Y	X	X
11	Y	X	X
12	Y	X	X
13	Y	X	X
14	Y	X	X
15	Y		X
16	Y		X
17	Y		X

Case No.8

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X		X
2	X		X
3	X		Y
4	X		Y
5	X		Y
6	X		Y
7	X		X
8	X		Y
9	X		X
10	X		Y
11	X		X
12	X		Y
13	X		X
14	X		X

Case No.9

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y		A
2	Y		A
3	Y		A
4	Y		A
5	Y		A
6	Y		A
7	Y		A
8	Y		A
9	Y		A
10	Y		A
11	Y		A
12	Y		A
13	Y		A
14	Y		A
15	Y		A
16	Y		A
17	Y		A
18	Y		A
19	Y		A
20	Y		A

Case No.10

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X		Y
2	X		Y
3	X		Y
4	X		Y
5	X		Y
6	X		Y
7	X		Y
8	X		Y
9	X		Y
10	X		Y
11	X		Y
12	X		Y
13	X		Y
14	X		Y
15	X		Y
16	X		Y
17	X		Y
18	X		Y
19	X		Y
20	X		Y

Appendix 2-4

Case No.11

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	X	Y
2	Y	X	Y
3	Y	X	Y
4	Y	X	Y
5	Y	X	Y
6	Y	X	Y
7	Y	X	Y
8	Y	X	Y
9	Y	X	Y
10	Y	X	Y
11	Y	X	Y
12	Y	X	Y
13	Y	X	Y
14	Y	X	Y
15	Y	X	Y
16	Y	X	Y
17	Y	X	Y
18	Y	X	Y
19	Y	X	Y
20	Y	X	Y
21	Y	X	Y
22	Y	X	Y
23	Y	X	Y
24	Y	X	Y

Case No.12

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	Y	Y
2	Y	Y	Y
3	Y	Y	Y
4	Y	Y	Y
5	Y	Y	Y
6	Y	Y	Y
7	Y	Y	Y
8	Y	Y	Y
9	Y	Y	Y
10	Y	Y	Y
11	Y	Y	Y
12	Y	Y	Y
13	Y	Y	Y
14	Y	Y	Y
15	Y	Y	Y
16	Y	X	Y
17	Y	Y	Y
18	Y	Y	Y
19	Y	Y	Y
20	Y	Y	Y
21	Y	X	Y

Case No.13

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	X	Y
2	Y	X	Y
3	Y	X	Y
4	Y	X	Y
5	Y	X	Y
6	Y	X	Y
7	Y	X	Y
8	Y	X	Y
9	Y	X	Y
10	Y	X	Y
11	Y	X	Y
12	Y	X	Y
13	Y	X	Y
14	Y	X	Y
15	Y	X	Y
16	Y		Y
17	Y	X	Y
18	Y	X	Y
19	Y	X	Y
20	Y		Y

Case No.14

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	Y	X
2	Y	Y	X
3	Y	Y	X
4	Y	Y	X
5	Y	Y	X
6	Y	Y	X
7	Y	Y	X
8	Y	X	Y
9	Y	X	Y
10	Y	X	Y

Appendix 2-5

Case No.15

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y		Y
2	Y		Y
3	Y		Y
4	Y		Y
5	Y		Y
6	Y		Y
7	Y		Y
8	Y		Y
9	Y		Y
10	Y		Y
11	Y		Y

Case No.16

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X	X	Y
2	X	A	Y
3	X	A	Y
4	X	A	Y
5	X	A	Y
6	X	A	Y
7	X	A	Y
8	X	X	Y
9	X	A	Y

Case No.17

Claim	Category of cited document		
	USPTO	EPO	JPO
1	Y	X	X
2	Y	A	X
3	Y	A	X
4	Y	A	X
5	Y	A	X
6	Y	A	A
7	Y	A	A
8	Y	A	A
9	Y	A	A
10	Y	A	A
11	Y		X
12	Y	A	X
13	Y		X
14	Y	X	A
15	Y	A	A
16	Y	A	A
17	Y	X	A
18	Y		A
19	Y		A
20	Y	A	A
21	Y	X	A
22	Y	A	A

Case No.18

Claim	Category of cited document		
	USPTO	EPO	JPO
1	X	X	Y
2	X	X	Y
3	X	X	Y
4	X	X	Y
5	X	X	Y
6	X	X	Y
7	X	X	Y
8	X	X	Y
9	X	X	Y
10	X	X	
11	X	X	
12	X	X	
13	X	X	
14	X	X	
15	X	X	
16	X	X	
17	X	X	
18	X	X	
19	X	X	

Appendix 2-6

Case No.19

	Category of cited document		
Claim	USPTO	EPO	JPO
1	Y	X	X
2	Y	X	Y

Case No.20

	Category of cited document		
Claim	USPTO	EPO	JPO
1	X	X	Y
2	X	X	Y
3	X	X	Y
4	X	X	Y
5	X	X	Y
6	X	X	Y
7	X	X	Y
8	X	X	Y
9	X	X	Y
10	X	X	Y
11	X	X	Y
12	X	X	Y
13	X	X	Y
14	X	X	Y
15	X	X	Y
16	X	X	Y
17	X	X	Y
18	X	X	Y

Appendix 3-1

Case No.1

(US: G06F17/60: 705/39)(JP: G06F17/60: G06F17/60 174)(EP: G06F9/46: G06F9/46R,G,M)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		3		(1)(4)EPODOC/WPI							
	EP	(3)DIALOG (EP Fulltext)				(1)(4)EPODOC/WPI							
	JP	(3)DIALOG (JAPIO)				(1)(4)EPODOC/WPI				(1)F-term			1
	WO	(3)DIALOG (WPI)				(1)(4)EPODOC/WPI (5)Full Text Patent DB	1 1						
	Others	(3)DIALOG (Chinese Pat)				(1)EPODOC/WPI							
Non-patent literature (NPL)		(2)DIALOG (business related files)				(2)INSPEC (3)Internet (http://www.researchindex.com et.al)	1		3	(2)F-term (CSDB) (3)JICST (4)Internet (5)Library		1 3 1	
Total				3			3		3			5	1

(1), (2), (3),...: These numbers in brackets represent the search order.

- The EPO preliminary searched EPODOC/WPI patent databases using G06F17/60, and with regard to the subject matter of the application of this invention, the EPO searched NPL using INSPEC and the Internet. Then, again, patent databases were text-searched with class limitations other than G06F17/06 such as G06F9/46.

- The JPO searched JP Patents using F-terms such as [5B045]*[BB35+..] etc., and then text-searched NPL using CSDB and JICST. The JPO text-searched NPLs using “FindArticles.Com” on the Internet and searched manually as well.

- The USPTO searched US Patents using EAST. The USPTO text-searched NPL using DIALOG (NPL Core Databases and Subject Specific Databases) and text-searched foreign patents using DIALOG.

Appendix 3-2

Case No.2

(US: G06F17/60: 705/1)(JP: G06F17/60: G06F17/60 174)(EP: G06F9/46: G06F9/46RGM)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)WEST (USPAT)		4		(2)TEXTUS	2						
	EP					(2)EPODOC							
	JP					(2)PAJ				(1)F-term		4	1
	WO					(2)TEXTWO							
	Others					(2)TEXTGB			1				
Non-patent literature (NPL)						(1)Internet	3						
Total				4			5		1			4	1

(1), (2), (3),...: These numbers in brackets represent the search order

- The JPO searched JP Patents using specific FI combined with another FI and F-term with another F-term and then text-searched JP Patents with specific FI under the specific Theme-Code.

- The USPTO text-searched US Patents.
- The USPTO noted that the statement of “intended use” in the preamble was not given any patentable weight.

- The EPO text-searched NPL using “Googles.” Internal databases were also text-searched.
- The EPO limited the search to claims 1-9 and 20-25 because of the lack of corresponding special technical features according to PCT Rules 13.1 and 13.3 (Lack of Unity).

Appendix 3-3

Case No.3

(US: G06F17/60: 705/26)(JP: G06F17/60: G06F17/60 234H)(EP: G06F17/60: G06F17/60B4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)USPAT	1			(1)WPI	1		1	(3)USPTO Web DB	1		
	EP	(2)EP Fulltext				(2)EPODOC							
	JP	(1)JAPIO				(1)PAJ,WPI				(2)F-term	1		
	WO	(1)PCTFULL	2		1	(1)WPI	2		1				
	Others					(1)WPI							
Non-patent literature (NPL)		(2)STN (Newswire) (2)DIALOG		(1)	2	(3)INSPEC			2	(1)Internet (4)ProQuest (5)DIALOG (FINBUS DB)			1 2
Total			3	(1)	3		3		4		2		3

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched the Internet using “Google,” “Yahoo,” and “FindArticles” and text-searched JP Patents using specific FI under the specific Theme-code or without using specific FI. The JPO then text-searched US Patents using USPTO Web databases under US class 705/104 or 707/5. The JPO also text-searched all databases in “ProQuest” and DIALOG.

- The USPTO text-searched Patents and NPL databases at the same time. The USPTO text-searched NPL using STN and DIALOG.
- The USPTO noted that statement of “intended use” in the preamble was not given any patentable weight.

- The EPO text-searched EPODOC with ECLA G06F17/06A,B and, then text-searched the other patent databases. The EPO text-searched INSPEC.
- The EPO commented that general purpose documents about weight searches are considered as novelty destroying because there is no technical effect (or further technical effect) of applying such as technique for searching financial information.

Appendix 3-4

Case No.4

(US: G06F17/60: 705/28)(JP: G06F17/60: G06F17/60 318G)(EP: G06F17/60: G06F17/60C4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)WEST	1	2		(2)WPI	4			(3)USPTO Web DB (4)DIALOG (EP,WO,US)	1 2		
	EP					(1)EPODOC				(4)DIALOG (EP,WO,US)			
	JP					(2)WPI				(2)F-term			
	WO					(2)WPI				(4)DIALOG (EP,WO,US)	1		
	Others					(2)WPI							
Non-patent literature (NPL)										(1)Internet			1
Total			1	2			4				4		1

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO preliminary searched NPL using the Internet sites “Google,”“Alta Vista” and “FindArticles” and then searched JP Patents classified specific FI or FI under the specific Theme-code with or without specific terms. Then the JPO used the USPTO Web DB and text-searched US Patents classified 705/28. Finally, the JPO text-searched EP WO and US patents using DIALOG.

- The USPTO used WEST to text-search US Patents.
- The USPTO noted that statement of “intended use” in the preamble was not given any patentable weight.

- The EPO searched EPODOC with ECLA G07F or G06F17/60C4 and then text-searched WPI.

- The JPO and the USPTO found the same US patent.

Appendix 3-5

Case No.5

(US: G06F17/60: 705/10)(JP: G06F17/60: G06F17/60 138)(EP: G06F9/44: G06F9/44W, W2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST (USPAT)	1		2	(1)WPI	2						
	EP					(1)WPI							
	JP					(1)WPI				(1)F-term	1	2	
	WO					(1)WPI							
	Others					(1)WPI	1						
Non-patent literature (NPL)		(2)Internet		1						(2)F-term (CSDB)			
Total			1	1	2						1	2	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO searched JP Patents classified G06F17/60 138 and then text-searched those classified G06F17/60, and finally text-searched without using classification. The JPO text-searched NPL using CSDB.

- The USPTO searched US Patents such as those classified USC 705/10 (customer relations aspect) and 709/227 (computer-to-computer communication aspect). The USPTO then searched NPL on the Internet.

- The EPO text-searched patent literature using WPI.

Appendix 3-6

Case No.6

(US: G06F17/60: 705/2)(JP: G06F17/60: G06F17/60 318G)(EP: G06F19/00: G06F19/00A2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		2	2	(1)TEXTUS	1						
	EP	(1)EAST(EP)				(1)EPODOC							
	JP	(1)EAST(JP)				(1)PAJ				(1)F-term	3		3
	WO	(1)EAST (DERWENT)				(1)WPI	1 1		2				
	Others	(1)EAST (DERWENT)				(1)WPI							
Non-patent literature (NPL)		(2)DIALOG		1									
Total				3	2		3		2		3		3

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP patents under the specific Theme-code such as [5B049+5L099+5B075] and then searched specific FI and then used specific F-terms.
- The JPO commented it is not clear whether each step of the claimed process invention is carried out by human being or by computer so that claim 1 may fall into the category of “methods of doing business” or “performing purely mental acts” prescribed by PCT rule 39.1(iii).

- The USPTO text-searched patent literature including US JP EP Patents and DERWENT. Then the USPTO searched DIALOG (business, marketing and agriculture-related databases).

- The EPO text-searched in English, German, French without classification, and then searched EPDOC using G06F19/00A2.

- The JPO and the USPTO found the same US patent and assigned different categories.

Appendix 3-7

Case No.7

(US: G06F17/60: 705/4)(JP: G06F17/60: G06F17/60 156)(EP: G06F17/60: G06F17/60D4, C)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)WEST		2		(1)unspecified	1		1	(5)USPTO Web DB (6)DIALOG (7)JPO PCF			 1
	EP					(1)unspecified				(6)DIALOG (7)JPO PCF			
	JP					(1)unspecified				(2)(8)F-term			
	WO					(1)unspecified	2			(5)DIALOG (7)JPO PCF			
	Others					(1)unspecified							
Non-patent literature (NPL)										(1)(4)Internet (3)ProQuest	1 1		1 1
Total				2			3		1		2		3

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO searched NPL using “Google,” “Find Articles” on the Internet. Then the JPO text-searched JP Patents under the specific Theme-code with or without the specific FI. The JPO next used ”ProQuest.” The JPO text-searched US Patents through USPTO Web databases and patent literature using DIALOG. Then the JPO used JPO PCF for searching text-searching EP WO US Patents.

- The USPTO text-searched US Patents using WEST focussing on computerized testing.
- The USPTO commented that patentable weight was not given to the type of data stored in the database as they represent non-functional data.

- The EPO text-searched with ECLA such as G06F17/60D4 or ICO such as S06F219.
- The EPO commented that the claims contain only generally known technical features (communication networks and databases) so that one could have issued a statement of non-establishment of search.

Appendix 3-8

Case No.8

(US: G06F17/60: 705/26)(JP: G06F17/60: G06F17/60 334)(EP: G06F17/60: G06F17/60C5)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST (USPAT)	2		2 1								
	EP	(1)EAST (FULLTEXT)											
	JP	(1)EAST (PAJ)								(1)F-term	1	3	1
	WO	(1)EAST (PCTFULL)											
	Others												
Non-patent literature (NPL)		(2)STN, DIALOG											
Total			2		3						1	3	1

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents with or without specific Theme-code such as 5B049.
- The JPO commented that it is not clear whether claimed steps are by computer or by person, but interpreted them as steps by computer when possible.

- The USPTO text-searched US Patents classified into 705/26 or 15. Then the USPTO searched STN and DIALOG.

- The EPO conducted no search since the claimed subject-matter without technical features falls under the provision of PCT Article 17(2)(a)(i) and Rule 39.1(iii), method of doing business.

Appendix 3-9

Case No.9

(US: G06F17/60: 705/7)(JP: G06F17/60: G06F17/60 334)(EP: G06F17/60: G06F17/60C5)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		1									
	EP												
	JP									(1)F-term			
	WO												
	Others												
Non-patent literature (NPL)		(2)DIALOG (3)ProQuest (4)Internet		1						(2)F-term (CSDB)			1
Total				2									1

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents classified into G06F17/60,334 or G06F17/60, and then searched NPL using CSDB.
- The JPO commented that it is not clear whether the claimed steps are by computer or by person, but interpreted them as steps by computer when possible.

- The USPTO text-searched US Patents under class 705/$. Then the USPTO searched NPL using DIALOG, ProQuest and the Internet site (http://www.catalogcity.com).

- The EPO conducted no search since the subject-matter claimed falls under the provision of PCT Article 17(2)(a)(i) and Rule 39.1(iii), method of doing business, and that trivial technical features stated in the claims (databases) are not searched because they are considered as known.

Appendix 3-10

Case No.10

(US: G06F17/60: 705/10)(JP: G06F17/60: G06F17/60 170A)(EP: G06F17/60: G06F17/60B2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)Hand search (2)EAST	3							(2)USPTO Web DB			
	EP	(2)EAST								(3)esp@ce		1	
	JP	(2)EAST								(1)F-term		2	
	WO												
	Others												
Non-patent literature (NPL)		(2)DIALOG (3)ProQuest (4)Corporate Net								(4)Internet			
Total			3									3	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents and foreign patent literature using F-Term system and then text-searched US Patents using USPTO Web databases. Then the JPO searched NPL using “NIkkei BP” and “Google” on the Internet. Then the JPO searched EP documents using “esp@cs” on the Internet.
- The JPO commented that it would not have performed a search if the JPO was officially establishing the International Search Report (ISR) as the International Searching Authority.

- The USPTO manually searched US Patents classified 705/10, and then text-searched US Patents using EAST. The USPTO also searched EPO/JPO Patent Abstract Database using EAST. The USPTO then searched NPL using DIALOG, ProQuest and CORPORATE NET.

- The EPO commented that the subject matter claimed falls under the provision of PCT Article 17(2)(a)(i) and Rule 39.1(iii), method of doing business, and that the trivial technical features stated in the claims (databases) are not searched because they are considered as known.

Appendix 3-11

Case No.11

(US: G06F17/60: 705/26)(JP: G06F17/60: G06F17/60 414)(EP: G06F17/60: G06F17/60D4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)STN (USPAT) (3)EAST	 1	 1	1 1	(1)unspecified			1	(2)USPTO Web DB (4)esp@ce (5)DIALOG (WPI)		1 1	
	EP	(1)STN (EUROPAT)				(1)unspecified				(4)esp@ce (5)DIALOG (WPI)			
	JP	(1)STN (JAPIO)								(1)(3)F-term (5)DIALOG (WPI)		4	
	WO	(1)STN (PCTFULL)	1	1		(1)unspecified	2		1	(5)DIALOG (WPI)			
	Others									(5)DIALOG (WPI)			
Non-patent literature (NPL)		(1)STN (2)DIALOG			1								
Total			2	2	3		2		2			6	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents and then text-searched combined with FI (G06F17/60,414). The JPO text-searched US Patents using USPTO Web database. The JPO searched EP Patents using esp@ce on the Internet. Finally the JPO text-searched patent literature using WPI.

- The USPTO text-searched all kind of literature including patent literature using STN and DIALOG. Then the USPTO text-searched US Patents with classification of 705/26, 44 or 713/201 or 707/$.

- The EPO text-searched EP Patents with ECLA G06F17/60, and then text-searched patent literature classified H04M17/00.

Appendix 3-12

Case No.12

(US: G06F17/60: 705/28)(JP: G06F17/60: G06F17/60 320)(EP: G06F17/60: G06F17/60B, C4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		4		(1)EPODOC (TXTUS)		1					
	EP					(1)EPODOC (TXTEP)		1					
	JP					(1)EPODOC (PAJ)				(1)F-term			
	WO					(1)EPODOC (WPI)	1						
	Others					(1)EPODOC (WPI)							
Non-patent literature (NPL)						(1)INSPEC (2)Internet				(2)F-term (CSDB)		2	
Total				4			1	2				2	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text searched JP Patents classified G06F17/60 320 and G06F17/60 subsequently. The JPO then searched NPL using CSDB.

- The USPTO text-searched US Patents using EAST.

- The EPO text-searched EP US GB WO without any class limitation, and then with class limitation such as G06F17/60C4(ECLA). The EPO searched NPL using “researchindex” on the Internet.

Appendix 3-13

Case No.13

(US: G06F17/60: 705/35,38)(JP: G06F17/60: G06F17/60 412)(EP: G06F17/60: G06F17/60B)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		3		(2)TXTUS	1			(3)JPO PCF (EP,US pat.) (4)USPTO Web DB		2	
	EP					(1)EPODOC				(3)JPO PCF (EP,US pat.) (5)esp@ce			
	JP					(2)WPI				(1)F-term			
	WO					(2)WO	2						
	Others					(2)WPI				(4)USPTO Web DB		1	
Non-patent literature (NPL)						(3)INSPEC			1	(2)ProQuest		1	1
Total				3			3		1			4	1

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents with limitation of G06F15/12Z (FI1987) under specific Theme-code. The JPO then searched NPL using ProQuest (ABI etc). The JPO text-searched EP US Patents using JPO PCF and USPTO Web databases. The JPO also searched EP Patents using esp@ce.

- The USPTO text-searched US Patents with class limitation of 705/35.

- The EPO searched EPODOC with limitations of G06F17/60B6 or G07F7/10F6. The EPO performed FACET search towards the non-EP patent literature. The EPO finally searched INSPEC. The EPO commented that claim 16 and 20 clearly fall under the exempted subject matter defined in PCT Rule 39 so that they were not searched.

Appendix 3-14

Case No.14

(US: G06F17/60: 705/27)(JP: G06F17/60: G06F17/60 326)(EP: G06F17/60: G06F17/60B2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST		3		(1)JV Fulltext (TEXTUS)		1	2				
	EP					(1)JV Fulltext (TEXTEP)							
	JP					(1)JV Fulltext				(1)F-term	1	2	
	WO					(1)JV Fulltext (TEXTWO)	1	1					
	Others					(1)JV Fulltext (TEXTGB)							
Non-patent literature (NPL)													
Total				3			1	2	2		1	2	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO used F-term system for text-searching without classification.
- The JPO considered that there is no common concept between the claim 1-7 and 8-10 so that this application is lacking unity of inventions.

- The USPTO text-searched US Patents with class limitation of 705/27.

- The EPO text-searched full text patent literature in G06F17/60++; G06F17/30 and G06F15/16.

Appendix 3-15

Case No.15

(US: G06F17/60: 705/14)(JP: G06F17/60: G06F17/60 324)(EP: G06F17/60: G06F17/60B2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)WEST		3						(1)JPO PCF (EP,US pat.)		4	
	EP									(1)JPO PCF (EP,US pat.) (3)esp@ce			
	JP									(2)F-term			
	WO												
	Others												
Non-patent literature (NPL)													
Total				3								4	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text searched EP US Patents using JPO PCF. Then JPO text-searched JP Patents classified FI (G06F15/21 330 et.al). Finally the JPO text-searched EP Patents using esp@ce.
- The JPO commented that search is not mandatory because this application relates nothing more than a “scheme of doing business.”

- The USPTO text searched US Patents.
- The USPTO commented that patentable weight was not given to the type of data stored in the accounts as they represents non-functional data.

- The JPO and USPTO found the same US patent.

- The EPO commented that the claims are considered to relate to subject matter to which no search is required according to PCT Rule 39, namely schemes, rules or methods of doing business. The EPO stated that given that the claims are formulated in terms of such subject matter or merely specify commonplace features relating to its technological implementation, the examiner could not establish any technical problem which might potentially have required an inventive step to overcome. The EPO finally stated that it was not possible to carry out a meaningful search into the state of the art (PCT Art.17(2)(a)(i) and (ii)).

Appendix 3-16

Case No.16

(US: G06F17/60: 705/2)(JP: G06F17/60: G06F17/60 126N)(EP: G06F19/00: G06F19/00A)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST (USPAT;US-PGP)	1		2	(1)(3)WPI	2						
	EP	(1)EAST (EPO)				(1)(2)(3)EPO DOC							
	JP	(1)EAST (JPO)				(1)(3)PAJ				(1)F-term		3	
	WO	(1)EAST (DERWENT)				(1)(3)WPI							
	Others	(1)EAST (DERWENT)				(1)(3)WPI							
Non-patent literature (NPL)		(1)EAST (IBMTDB) (2)DIALOG (FINANCIAL BUSINESS DATABASE)	1		1	(1)(3)INSPEC etc (1)(3)Internet			2				
Total			2		3		2		2			3	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents and then searched using FI (G06F17/30,130@A). The JPO also text-searched combined with FI (G06F17/60,126@N). The JPO text-searched under Theme-code such as [5B049+5L099+5B075].

- The USPTO text-searched Patent Literature and NPL.

- The EPO text-searched EPODOC, INSPEC, WPI, PAJ, COMPUAB, MEDINF, MEDENG and Internet. The EPO searched EPODOC classified ECLA (G06F19/00@A, A1, A2).

- The three Offices found relevant family patents and the JPO assigned different category from the USPTO and EPO.

Appendix 3-17

Case No.17

(US: G06F17/60: 705/37)(JP: G06F17/60: G06F17/60 250)(EP: G06F17/60: G06F17/60B4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)WEST (2)EAST		2		(1)WPI	1		2	(2)JPO PCF (EP,US) (4)esp@ce (EP,US,WO)	1		1
	EP					(1)EPODOC				(2)JPO PCF (EP,US) (4)esp@ce (EP,US,WO)			
	JP					(1)PAJ				(1)(3)F-term			
	WO					(1)WPI			1	(4)esp@ce (EP,US,WO)			1
	Others					(1)WPI							
Non-patent literature (NPL)						(2)TDB INSPEC							
Total				2							1		2

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents and then searched combined with F-term ([9A001]*[JJ64]). The JPO text-searched US Patents with classifications of [705/37+G06F17/60B4](US/EP class). The JPO text-searched EP Patents classified ECLA (G06F17/60B4).

- The USPTO text-searched US Patents with the class limitation of 705/37.

- The EPO text-searched domestic and foreign patent literature with classification of G06F17/60B4. Then the EPO text-searched non-patent literature by using TDB and INSPEC.
- The EPO commented that the application appears to be mainly a business method with some commonplace technical features so that a “No Search” declaration could have been issued.

Appendix 3-18

Case No.18

(US: G06F153/00: 705/29)(JP: G06F17/60: G06F17/60 114)(EP: G06F17/60: G06F17/60C,C4,C5)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)EAST	1	1		(1)WPI	1		3				
	EP					(1)EPODOC							
	JP					(1)WPI, PAJ				(1)F-term		5	
	WO					(1)WPI							
	Others					(1)WPI							
Non-patent literature (NPL)		(2)DIALOG				(1)INSPEC (2)Internet (Sites & DB concerning FA)							
Total			1	1			1		3			5	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents and then used F-term and FI.
- The JPO commented that claims 11-19 contains business activities so that it falls under the term of PCT Rule 39.1(iii).

- The USPTO text-searched US Patents classified (705/22, 705/28 or 705/29).

- The EPO text-searched domestic and foreign patent literature such as EPODOC, WPI, PAJ. The EPO also searched NPLs such as INSPEC, COMPEBDEX. The EPO used “ACM” and “IEEEXPLORE” on the Internet. ECLA classes have been searched such as “G06F17/60C4, G06F17/60C5.”

Appendix 3-19

Case No.19

(US: G06F153/00: 705/9)(JP: G06F17/60: G06F17/60 162A)(EP: G06F17/60: G06F17/60B2, A4)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(3)EAST		3 1		(2)WPI	2						
	EP					(1)EPODOC			1				
	JP					(3)PAJ				(1)F-term	1	1	
	WO	(3)EAST			1	(2)WPI			1				
	Others					(2)WPI							
Non-patent literature (NPL)		(1)Internet (2)ProQuest (4)DIALOG			1 1 2	(3)TDB INSPEC							
Total				4	5						1	1	

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP Patents assigned specific FI (G06F17/60,162@A, G06F17/60,172@A)
- The JPO commented it is not clear that claimed steps are the steps by computer or the steps by person, but the claimed steps are interpreted as steps by computer if it is possible.

- The USPTO text-searched “Google” and “ProQuest,” etc. The USPTO used EAST for searching US Patents and foreign patents by text-search or US Class 705/14 or their combination. The USPTO searched NPL by using DIALOG.

- The EPO text-searched EP Patents assigned specific ECLA (G06F17/60A4 or B2) and then text-searched foreign patent literature with a limitation of specific IPC (G06F17/60) by using WPI. PAJ, TDB and INSPEC were also text-searched.
- The EPO commented that the application appears to be mainly a business method with some commonplace technical features so that a “No Search” declaration could have been issued.

- The USPTO and EPO found the same US patent and assigned different categories.

Appendix 3-20

Case No.20

(US: G06F153/00: 705/28)(JP: G06F17/60: G06F17/60 330)(EP: G06F17/60: G06F17/60B2)

		USPTO	X	Y	A	EPO	X	Y	A	JPO	X	Y	A
Patent documents	US	(1)Hand search (2)EAST (USPAT)	2		3	(1)WPI	1		1	(1)F-term		1	
	EP					(1)EPODOC			1				
	JP					(2)PAJ				(1)F-term			
	WO					(1)WPI							
	Others												
Non-patent literature (NPL)		(3)DIALOG				(2)TDB (2)INSPEC			1	(1)F-term (2)Internet	(1)	1 1	2
Total			2		3						(1)	3	2

(1), (2), (3),...: These numbers in brackets represent the search order.

- The JPO text-searched JP and US etc. Patents classified G06F17/60 330. Then, JP and US etc. Patents with G06F17/60 were text-searched. Then, NPLs were text-searched using the Internet with different terms from those used in text-searching Patent Literature.

- The USPTO conducted manual search of US Patents classified 705/28, 26. Then, US Patents were text-searched, then text-searched combined with the Class 705/26 using EAST. NPLs were text-searched by the same terms as used in the EAST.

- The EPO text-searched domestic and foreign patent literature with a limitation of G06F17/60. PAJ,TDB and INSPEC were subsequently text-searched.
- The EPO commented that the application appears to be mainly a business method with some commonplace technical features so that a “No Search” declaration could have been issued.

- The three Offices found relevant family patents by different search strategies and assigned different categories.

Appendix 4

Search tools and strategies comparative table

	Search Sources/Tools		X document							Y document							A document							X or Y	Total
			PL					NPL		PL					NPL		PL					NPL			
			JP	US	EP	WO	Oth.	Jap	Eng	JP	US	EP	WO	Oth.	Jap	Eng	JP	US	EP	WO	Oth.	Jap	Eng		
USPTO	EAST/ WEST (Full Text Patent DB, WPI, etc.)	USC		4							13							4						17	21
		text		8							21							8		1				29	38
	DIALOG (marketing, business, financial)								1							1							4	2	6
	STN			1		3							1			1		2		1			1	6	10
	ProQuest															1							1	1	2
	Internet (*Google* etc.)																							0	0
	Others/Unspecified										1					1							2	2	4
		Total	0	13	0	3	0	0	1	0	35	0	1	0	0	4	0	14	0	2	0	0	8	57	81
EPO	EPODOC (Full Text Patent DB, WPI, PAJ)	ECLA		2		4												1	1					6	8
		text		10		7			1		1		1					6		4			1	20	31
	INSPEC																				2			0	2
	Internet (*Google* etc.)								4														3	4	7
	Internal library (books)																							0	0
	Others/Unspecified			7		3					1	1						4	1	2	1		3	12	23
		Total	0	19	0	14	0	0	5	0	2	1	1	0	0	0	0	11	2	6	3	0	6	42	59
JPO	F-Term(JP Pat. Full Text DB, US,EP,WO, etc.)	FI/ F-term	3							10							2			1				14	17
		text	5							16	1				1		3							23	26
	JPO PCF			1							4							1		1				5	7
	USPTO Web DB	USC		2																				2	2
		text									3			1										4	4
	esp@ce	ECLA																						0	0
		text									1	1												2	2
	Internet (*Google* etc.)								1							4							6	5	11
	CSDB (internal DB)							1							3							1		3	4
	DIALOG			2		1												1						3	4
	ProQuest								1							1							4	2	6
	Internal library (books)															1								1	1
	Others (JICST etc.)																							0	0
		Total	8	5	0	1	0	1	2	26	9	1	0	1	4	6	5	2	0	2	0	1	10	64	84

Appendix 5

Main Databases or Search Engines used for searching NPL

USPTO	EPO	JPO
Internet Sites	Internet Sites	Internet Sites
○ Google (1) ○ ProQuest (3)	○ Google (2) ○ ACM (1) ○ IEEE*Xplore* (1)	○ Google (4) ○ ProQuest (3) - ABI (2) - accounting (2) - core (2) - telecom (2) ○ FindArticles (4) ○ AltaVista (1) ○ Nikkei BP (1) ○ Yahoo! (1)
Databases (internal or external)	Databases (internal or external)	Databases (internal or external)
○ DIALOG (11) - marketing, business, financial (1) ○ STN (3) - NLDB (1) - PROMT (1)	○ INSPEC (9) (Physics, electronics and computing abstracts (IEE)) ○ TDB (6) (IBM Technical Disclosure Bulleting) ○ COMPENDEX (3) ○ XPESP (2) (Journals of Elsevier Science publications)	

- SCISEARCH (1) - PR Newswin (1) ○ IBM TDB (2)	○ COMPUABSTRACT (2) ○ COMPUSCIENCE (2) ○ MEDLINE (1) ○ XPIEE (1)	○ CSDB (4) (internal database) ○ DIALOG (4) - group FINBUS databases (1) ○ JICST (1)

・The number in bracket represents the number of times the search engine or database concerned was used for searching NPL.

・Relevant NPL to which X or Y categories were assigned was found by using the “underlined” search engines and databases.